



## Certificate of Analysis

1 Reagent Lane  
Fair Lawn, NJ 07410  
201.796.7100 tel  
201.796.1329 fax

ThermoFisher Scientific's Quality System has been found to conform to Quality Management System  
Standard ISO9001:2008 standard by SAI Global Certificate Number CERT - 0090918

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. ThermoFisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Certain products (USP/FCC/NF/EP/BP/JP grades) are sold for use in food, drug, or medical device manufacturing. ThermoFisher does not maintain DMF's with the FDA. The following are the actual analytical results obtained:

Catalog Number	A453	Quality Test / Release Date	07/27/2018
Lot Number	183485		
Description	METHANOL, PURGE & TRAP GRADE		
Country of Origin	Venezuela	Suggested Retest Date	Jul/2023
Chemical Origin	Organic - synthetic		
BSE/TSE Comment	This product is derived from petroleum products. It does not contain any materials that are of human or animal origin, nor does it come into contact with such materials during the manufacturing process. Therefore, to the best of our knowledge, there is no potential for BSE or TSE to be present in this product.		
Chemical Comment			

Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	Clear colorless liquid free of suspended matter.
WATER (KARL FISCHER)	%	<= 0.2	.06
OTHER DETECTABLE PEAKS AS HEXANE	ppb	<= 50	<10
TITRATABLE BASE	MEQ/G	<= 0.0002	<0.0001
AROMATIC COMPOUNDS	ppb	<= 10	<10
ASSAY	%	>= 99.9	99.99
ACETONE	ppb	<= 50	<25
EVAPORATION RESIDUE	ppm	<= 1	<0.1
2-BUTANONE	ppb	<= 50	<25
METHYL ISO-AMYL KETONE	ppb	<= 50	<25
OTHER DETECTABLE KETONES	ppb	<= 50	<25
VOLATILE ORGANIC CMPDS (EPA8260B OR EQUIV)	PASS/FAIL	= PASS TEST	PASS TEST
METHYLENE CHLORIDE	ppb	<= 10	<10
CHLOROFORM	ppb	<= 10	<10
CARBON TETRACHLORIDE	ppb	<= 10	<10
OTHER DETECTABLE CHLOROHYDROCARBONS	ppb	<= 10	<10
PENTANE	ppb	<= 50	<25
HEXANE	ppb	<= 50	<25
HEPTANE	ppb	<= 50	<25
ISO-OCTANE	ppb	<= 50	<25
OTHER DETECTABLE ALKANES	ppb	<= 50	<25
TITRATABLE ACID	MEQ/G	<= 0.0003	.0001

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above. If there are any questions with this certificate, please call at (800) 227-6701.

\*Based on suggested storage condition.



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A handwritten signature in black ink that reads "Jerisa Bailey-Wyche". The signature is written in a cursive, flowing style.

Quality Assurance Specialist - Certificate of Analysis Bridgewater

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